

REMARKS

In reply to the office action of December 28, 2007, Applicants have not amended, canceled, or added any claims. Accordingly, claims 1-4, 6-15, 17-25, 27, 28, 30, 31, 33-49, 52, and 54-64 are pending, with claims 1, 13, 17, 52, and 64 in independent form.

Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 36, 37, and 64 would be allowable if rewritten in independent form. Applicants note that while claims 36 and 37 depend from claim 1, claim 64 is already in independent form. Accordingly, Applicants presume that claim 64 is presently allowable, and respectfully request that the Examiner correct Applicants' understanding if it is incorrect.

Rejections Under 35 U.S.C. § 112

Claims 8 and 23 stand rejected under 35 U.S.C. § 112, second paragraph. With respect to claim 8, the Action alleges that there is insufficient antecedent basis for the limitation "the chip" in line 3 of the claim, as the term "chip" is not recited in claim 1, from which claim 8 depends (see Action at page 2). However, line 2 of claim 8 recites that "*a chip* is to be mounted on said chip mounting area" (emphasis added), which provides antecedent basis for "the chip" recited in line 3 of claim 8.

Similarly, the Action alleges that there is insufficient antecedent basis for the limitation "the chip" in line 3 of claim 23, as the term "chip" is not recited in claim 17, from which claim 23 depends. However, line 2 of claim 23 recites that "a chip is to be mounted on said chip mounting area," which provides antecedent basis for "the chip" recited in line 3 of claim 23.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 8 and 23 under 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 102

Claims 1-4, 6-7, 10, 13, 15, 17-22, 24-25, 27-28, 30-31, 33-34, 38-40, 43-46, 52, and 55-63 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Arndt (U.S. Patent No. 6,376,902, "Arndt"). In particular, the Action rejects each of independent claims 1, 13, 17, and 52 as allegedly anticipated by Arndt. Applicants respectfully disagree, and will address these independent claims separately.

Claim 17 covers housings for light-emitting components. The housings include a leadframe and a housing base body. The Action refers to Figures 1A and 1B of Arndt as allegedly disclosing the limitations of claim 17 (see Action at page 3). As best Applicants understand the relation between Arndt's devices and the housings of claim 17, casing 3 of Arndt's optoelectronic elements, which "relates to a housing for optoelectronic structural elements known in semiconductor technology" (Arndt, col. 7, lines 22-24), corresponds to the "housing base body formed from a molding compound" which is recited in claim 17.

According to the Action, the other elements of Arndt's devices should therefore correspond to the other features recited in claim 17. But, Applicants can find no reasonable interpretation of the other elements of Arndt's devices that is consistent with all of the limitations of claim 17. For example, claim 17 recites a leadframe that includes "a mount part having: at least one wire connecting area; an opening formed therein and extending completely through the mount part; and at least one external electrical connecting strip." Arndt's devices do not include a mount part according to claim 17. As discussed above, casing 3 is not the claimed mount part – casing 3 corresponds to the housing base body. Leadframe 7 and/or portions thereof (e.g., chip mounting area 2, external connections 4, 5, 6) does not correspond to the mount part, as leadframe 7 does not include "an opening formed therein and extending completely through the mount part," as required by claim 17. Similarly, external connection 9 does not include an opening, and does not therefore correspond to the mount part. Arndt simply fails to either disclose or suggest a mount part in accordance with all of the limitations of claim 17.

In addition, claim 17 recites "a separately manufactured thermal connecting part disposed in said opening and fastened into said mount part," where "the thermal connecting part extends

through the opening in the mount part.” As discussed above, Arndt does not disclose a mount part, and therefore there is no element in Arndt’s devices that “extends through the opening in the mount part” and is “fastened into said mount part.” The Action appears to suggest that a combination of chip mounting area 2 and leadframe 7 corresponds to the recited thermal connecting part (see Action at page 3). However, neither leadframe 7 nor chip mounting area 2 (which is simply a portion of leadframe 7) is fastened into an opening in a mount part. Instead, leadframe 7 is embedded within the housing base body (e.g., casing 3).

Moreover, Applicants note that claim 17 requires a “separately manufactured thermal connecting part.” The Action alleges that “the term ‘separately manufactured’ is merely [a] product by process” (Action at page 3), stating that “[t]he patentability of a product does not depend upon *its method of production*” (Action at page 4, emphasis added). Applicants respectfully disagree that the term “separately manufactured” corresponds to a product-by-process limitation.

In claim 17, the term “separately manufactured” is a structural limitation which indicates that the thermal connecting part is a separate part from the mount part, which is then “fastened into said mount part.” The term “separately manufactured” does not relate to a particular method of production, and claim 17 is not therefore restricted to a mount part and/or thermal connecting part formed by a specific method. Instead, the use of the term “separately manufactured” makes clear that the mount part and the thermal connecting part are not formed as a single, integral piece, but are instead formed as separate parts that are then fastened together during assembly.

In connection with this, the Action appears to suggest that external connections 4 and/or 9 correspond to the “at least one external electrical connecting strip,” which is a component of the mount part. However, external connection 4 is merely an extension of leadframe 7; leadframe 7 is an integral component, and therefore cannot correspond to *both* a mount part and a thermal connecting part, as claim 17 requires that these parts be “separately manufactured” and fastened together such that the thermal connecting part is “disposed in said opening” of the mount part. Moreover, and with regard to external connection 9, leadframe 7 is not connected to connection 9 at all. Applicants cannot find any reasonable interpretation of Arndt’s disclosure

that includes both a mount part and a separate thermal connecting part, in accordance with all of the limitations of claim 17.

Accordingly, for at least the above reasons, Applicants submit that Arndt fails to disclose or suggest the housings covered by claim 17.

Independent claims 1 and 13 cover leadframes for radiation-emitting components, which leadframes include some of the same features recited in claim 17. Claims 1 and 13 do not recite a housing base body. However, because the rejections of claims 1, 13, and 17 in the Action are based, apparently identically, on Arndt, it is reasonable to assume that, with respect to claims 1 and 13, the Action alleges that casing 3 continues to correspond to the housing base body, and that the other elements of Arndt's devices correspond to the features of claims 1 and 13.

Applicants believe, therefore, that Arndt fails to disclose or suggest the leadframes covered by claims 1 and 13 for at least the following reasons. First, claims 1 and 13 recite a mount part having "an opening formed therein and extending completely through the mount part." As discussed above in connection with claim 17, Arndt does not disclose such a mount part. Leadframe 7 (and portions thereof) does not include an opening, nor does external connection 9. Casing 3 corresponds to the housing base body, and not, therefore, to the required mount part. There is simply no disclosure in Arndt that relates to the mount part required by claims 1 and 13.

Second, claims 1 and 13 require a "separately manufactured thermal connecting part disposed in said opening and fastened into said mount part." As discussed above in connection with claim 17, Arndt does not disclose or suggest a thermal connecting part that is separate from a mount part, and fastened into an opening in the mount part. Instead, Arndt's devices include a single, integral leadframe 7 which does not include an opening. There is simply no disclosure or suggestion in Arndt that relates to a mount part and a separate thermal connecting part fastened into an opening in the mount part.

Third, claim 1 requires that the thermal connecting part have "at least one chip mounting area and a reflector well surrounding said chip mounting area." Arndt does not disclose a thermal connecting part that includes a reflector well surrounding a chip mounting area. The

Action points to recess 11 as the claimed reflector well (see Action at page 3). However, recess 11 is formed in casing 3 – the housing base body – not in a thermal connecting part, as required by claim 1. There is no disclosure or suggestion in Arndt relating to a thermal connecting part having a reflector well surrounding a chip mounting area, as required by claim 1.

Even if, for the sake of argument only, casing 3 is considered to correspond to the mount part recited in claims 1 and 13 (which Applicants do not agree with or concede), Arndt still fails to disclose or suggest the leadframes covered by claims 1 and 13. Each of claims 1 and 13 requires that the mount part include “an opening formed therein and extending completely through the mount part.” However, casing 3 does not include an opening that extends completely therethrough. Instead, casing 3 includes a recess 11 that extends only partially through the casing, as shown in Figure 1B of Arndt.

In addition, each of claims 1 and 13 requires a mount part that includes “at least one external electrical connecting strip,” and “a separately manufactured thermal connecting part disposed in said opening and fastened into said mount part to form an electrical connection with the at least one external electrical connecting strip.” Casing 3 does not include an external electrical connecting strip in accordance with claims 1 and 13. Instead, external connections 4, 5, and 6 are merely extensions of leadframe 7. Leadframe 7 is an integral piece – as discussed above, leadframe 7 cannot correspond to *both* the external electrical connecting strip of the mount part and the *separately manufactured* thermal connecting part. Furthermore, external connection 9 cannot correspond to the claimed external electrical connecting strip, as there is no electrical connection between, e.g., leadframe 7 and external connection 9, as required by claims 1 and 13. Arndt simply fails to either disclose or suggest a mount part and a separate thermal connecting part as recited by claims 1 and 13.

Moreover, claim 1 requires a thermal connecting part that includes “a reflector well that surrounds said chip mounting area.” However, recess 11 in Arndt's devices is formed in casing 3, and not in a thermal connecting part, as required by claim 1. There is no disclosure in Arndt that relates to a reflector well formed in a thermal connecting part, and there is no suggestion to provide such a reflector well in Arndt's devices.

Therefore, Applicants submit that under either reading of Arndt's disclosure (e.g., with casing 3 as either the housing base body or the mount part), Arndt fails to disclose or suggest the leadframes covered by claims 1 and 13.

Claim 52 covers leadframes that include, in part, "a first electrically conductive component having a mounting region and an electrical connecting strip extending from the mounting region, the mounting region having an opening formed therein." However, Arndt's devices do not include a first electrically conductive component in accordance with claim 52. Referring to Figures 1A and 1B of Arndt, casing 3 cannot correspond to the claimed first electrically conductive component, because casing 3 is not electrically conductive. External connection 9 cannot correspond to the first electrically conductive component, because connection 9 does not include an opening. Similarly, leadframe 7 (and portions thereof) cannot correspond to the first electrically conductive component, because leadframe 7 does not include an opening. Arndt's devices simply do not include the first electrically conductive component recited by claim 52.

In addition, claim 52 requires, in part, "a separately manufactured thermal connecting part disposed in the opening of the mounting region and secured to the mounting region to form an electrical connection with the first electrically conductive component." Arndt does not disclose such a thermal connecting part. To the contrary, as discussed above, Arndt does not even disclose a first electrically conductive component having a mounting region, and so there is no component in Arndt's devices that corresponds to a thermal connecting part "disposed in the opening of the mounting region," as required by claim 52.

Moreover, as discussed above in connection with claims 1, 13, and 17, leadframe 7 is an integral component, and therefore cannot correspond to both the first electrically conductive component and the separately manufactured thermal connecting part. Accordingly, with leadframe 7 as the thermal connecting part, there is no electrical connection with a first electrically conductive component, as required by claim 52. Leadframe 7 does not form an electrical connection to either casing 3 or to external connection 9.

Further, claim 52 requires that the thermal connecting part include "a reflector well surrounding said chip mounting area." As shown in Figure 1B of Arndt, recess 11 is formed in casing 3, not in leadframe 7. Arndt simply fails to either disclose or suggest a thermal connecting part that includes a reflector well.

For at least the above reasons, Applicants submit that Arndt does not disclose or suggest the leadframes covered by claim 52.

In view of all of the foregoing reasons, Applicants believe that no reasonable interpretation of Arndt's disclosure is consistent with all of the limitations of claims 1, 13, 17, and 52, and Applicants therefore believe that each of claims 1, 13, 17, and 52 is patentable over Arndt. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 13, 17, and 52 under 35 U.S.C. § 102(b).

Each of claims 2-4, 6-7, 10, 15, 18-22, 24-25, 27-28, 30-31, 33-34, 38-40, 43-46, and 55-63 depends from one of claims 1, 13, 17, and 52, and is therefore patentable for at least the same reasons. Accordingly, reconsideration and withdrawal of the rejection of claims 2-4, 6-7, 10, 15, 18-22, 24-25, 27-28, 30-31, 33-34, 38-40, 43-46, and 55-63 under 35 U.S.C. § 102(b) is respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 8 and 23 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Arndt. Claims 9 and 35 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Arndt in view of Carey et al. (U.S. Patent No. 6,271,924, "Carey"). Claim 12 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Arndt in view of Parthasarathi (U.S. Patent No. 5,650,663, "Parthasarathi"). Claim 14 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Arndt in view of Han et al. (U.S. Patent Application Publication No. US 2001/0054761, "Han"). Claims 41, 42, 47, and 48 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Arndt in view of Matsumoto et al. (JP 402187058, "Matsumoto"). Claim 49 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Arndt in view of Mahulikar et al. (U.S. Patent No. 5,608,267,

“Mahulikar”). Claim 54 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Arndt in view of Huang (U.S. Patent No. 6,664,649, “Huang”).

Without addressing or conceding the merits of any of these combinations of references, Applicants note that each of claims 8, 9, 12, 14, 23, 35, 41, 42, 47-49, and 54 depends from one of claims 1, 13, 17, and 52. Each of claims 1, 13, 17, and 52 is patentable over Arndt for at least the reasons discussed above. None of Carey, Parthasarathi, Han, Matsumoto, Mahulikar, or Huang cures the deficiencies of Arndt with regard to claims 1, 13, 17, and 52. Therefore, each of claims 1, 13, 17, and 52 is patentable over Arndt, Carey, Parthasarathi, Han, Matsumoto, Mahulikar, and Huang, alone or in combination. Further, each of claims 8, 9, 12, 14, 23, 35, 41, 42, 47-49, and 54 is also therefore patentable over Arndt, Carey, Parthasarathi, Han, Matsumoto, Mahulikar, and Huang, alone or in combination, for at least the same reasons as claims 1, 13, 17, and 52. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 8, 9, 12, 14, 23, 35, 41, 42, 47-49, and 54 under 35 U.S.C. § 103(a).

In view of the foregoing, Applicants ask that the application be allowed, especially in view of the protracted prosecution that has already occurred in this application.

Canceled claims, if any, have been canceled without prejudice or disclaimer. Any circumstance in which Applicants have: (a) addressed certain comments of the Examiner does not mean that Applicants concede other comments of the Examiner; (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims; or (c) amended or canceled a claim does not mean that Applicants concede any of the Examiner's positions with respect to that claim or other claims.

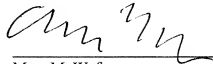
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Fees for the Petition for Extension of Time are being paid concurrently on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to deposit account 06-1050, referencing 12406-127001.

Respectfully submitted,

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